

Claims

1. A method of stabilising ester concentrates of polyunsaturated fatty acids (PUFAs) by adding to the concentrate (a) a mixture of rosemary or sage extract, ascorbyl palmitate and tocopherols before submitting it to a standard deodorisation process and (b) a crystallization inhibitor before or after the deodorisation process.
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2. The method of claim 1 wherein further additives, able to prevent deterioration of PUFAs, are added to the concentrate before or after the deodorisation process.
- 10 3. The method of claim 1 wherein the ester concentrates are ethyl esters.
4. The method of claim 1 or claim 3, wherein a concentrate of ethyl esters of EPA and DHA is deodorized.
- 15 5. The method of anyone of claims 1 – 4, wherein the concentrate contains more than 50% of PUFA ethyl esters.
6. The method of anyone of claims 1 – 5, wherein 0.05 – 4.0%, preferably 0.1 – 0.2%, of rosemary or sage extract is added.
7. The method of anyone of claims 1 – 6, wherein 0.01 – 0.04%, preferably 0.025%, of ascorbyl palmitate is added.
- 20 8. The method of anyone of claims 1 – 7, wherein 0.05 – 0.5%, preferably 0.2%, of tocopherols is added.
9. The method of anyone of claims 1 – 8 wherein the crystallization inhibitor is a lecithin.
10. The method of claim 9 wherein 0.01% - 1.0%, preferably 0.02% - 0.05% of a lecithin is added.
- 25 11. The method of anyone of claims 2 – 10, wherein in addition 0.001 – 0.01%, preferably 0.005%, of citric acid is added.
12. The method of anyone of claims 1 – 11, wherein vacuum steam deodorisation is used.

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13. The method of anyone of claims 1 – 12, wherein the vacuum steam deodorization is effected at a temperature between about 120°C and about 150°C at 0.1 – 10 mbar, most preferably at 140°C and 1 - 5 mbar.
- 5 14. Stabilized PUFA ester concentrates which are obtained by a method according to anyone of claims 1 – 13.
15. Use of a stabilized PUFA ester concentrate obtained according to a method claimed in anyone of claims 1 – 13 for the preparation of food applications.
- 10 16. A method of enriching food with PUFA esters characterized in that a stabilized PUFA ester concentrate according to claim 14 is added to the food.